

9. The method of claim 1, wherein generating the training data comprises storing the context data as a training data sample and an identification of the target stationary playback device as a label for the training data sample.

10. The method of claim 9, wherein updating the prediction model comprises:

passing the training data sample through the prediction model to generate probabilities for each stationary playback device of the plurality of stationary playback devices;

computing a loss based on the generated probabilities and the target stationary playback device; and

updating weights of the prediction model based on the computed loss.

11. The method of claim 9, wherein generating the training data further comprises storing the predicted stationary playback device, wherein updating the prediction model comprises:

computing a loss based on the predicted stationary playback device and the target stationary playback device; and

updating weights of the prediction model based on the computed loss.

12. The method of claim 1, wherein the context data further comprises at least one of a time of day, day of the week, and a user identity.

13. A method for training a prediction engine in a media playback system, the method comprising:

monitoring a media playback system comprising a plurality of playback devices;

determining whether to capture training data;

identifying a true user interaction;

identifying a predicted user interaction from a prediction model; and

generating training data based on the true user interaction and the predicted user interaction.

14. The method of claim 13, wherein monitoring the system comprises localizing a portable device within the media playback system to determine a probability matrix, wherein the probability matrix indicates likelihoods that the portable device is nearest to each of the plurality of playback devices, wherein identifying the predicted user interaction comprises feeding the probability matrix as an input to the prediction model.

15. The method of claim 13, further comprising obtaining context data, wherein the context data comprises a set of data from the group consisting of user data, system state data, and localization data.

16. The method of claim 13, wherein:

monitoring the media playback system comprises localizing a portable device in the media playback system; and

determining whether to capture training data comprises determining whether a confidence level for the localizing of the portable device exceeds a threshold value.

17. A portable device comprising:

one or more processors; and

data storage having stored therein instructions executable by the one or more processors to cause the portable device to perform a method comprising:

receiving context data for the portable device, wherein the context data comprises localization data that describes a location of the portable device;

identifying a predicted stationary playback device from a plurality of stationary playback devices in a media playback system that is predicted based on the context data using a prediction model;

receiving input identifying a target stationary playback device from the plurality of stationary playback devices;

generating training data based on the predicted stationary playback device and the received input; and  
updating the prediction model based on the generated training data.

18. The portable device of claim 17, further comprising a touch-screen display configured to display a graphical user interface.

19. The portable device of claim 18, wherein the method further comprises updating the graphical user interface displayed on the touch-screen display based on the predicted stationary playback device.

20. The portable device of claim 18, wherein receiving input identifying the target stationary playback device comprises receiving input identifying the target stationary playback device via the graphical user interface displayed on the touch-screen display.

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